

In The Claims

Please amend the claims as follows:

1. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate of the second transistor;

a storage capacitor connected to the current-source line and the gate of the first transistor, for storing a voltage signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and

a third transistor that has a source and a drain connected to the electrode and a gate signal line for a display element other than said display element, and that has a gate controlled such that current flowing from the first transistor to the electrode is led to the gate signal line for the other display element.

2. (ORIGINAL) The display apparatus according to claim 1, wherein the gate of the third transistor is connected to a second current-source line for the display

element other than the display element to thereby perform control such that the gate is put into an on state or off state.

3. (ORIGINAL) The display apparatus according to claim 1, wherein the gate of the third transistor is connected to the gate signal line for the other display element to thereby perform control such that the gate is put into an on state or an off state.

4. (ORIGINAL) An active-matrix display apparatus, comprising:

- a substrate;

- an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

- a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

- a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to the gate of the second transistor;

- a storage capacitor connected to the current-source line and the gate of the first transistor for storing a voltage signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and

- a third transistor that has a source and a drain connected to the electrode and the gate signal line, and that has a gate put into an on state or an off state by changing a potential of a gate signal line for a display element other

than said display element, so that current flowing from the first transistor to the electrode is led to the gate signal line.

5. (CURRENTLY AMENDED) The display apparatus according to ~~one of~~ claims 1 to 4 claim 1, wherein the display element is an organic EL element.

6. (CURRENTLY AMENDED) The display apparatus according to ~~one of~~ claims 1 to 4, wherein the gate of the third transistor is connected to a power-source supply line that is additionally provided.

7. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate thereof;

a storage capacitor connected to the current-source line and the gate of the first transistor for storing a voltage signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and

a third transistor that has a source and a drain connected to the electrode and an additionally-provided power-source supply line and whose

gate is controlled such that current flowing from the first transistor to the electrode is led to the additionally-provided power-source supply line.

8. (CURRENTLY AMENDED) The display apparatus according to ~~one of claims 1 to 4 or 7~~, wherein the third transistor is p-type.

9. (CURRENTLY AMENDED) The display apparatus according to ~~one of claims 1 to 4 or 7~~, wherein a line from the third transistor is connected to a peripheral circuit for simultaneously controlling two or more of the display elements when the display apparatus is in an operation state, and the third transistors are sequentially switched via the peripheral circuit.

10. (CURRENTLY AMENDED) A method for inspecting each display element of ~~the active matrix display apparatus according to one of claims 1 to 4 or 7~~ an active-matrix display apparatus comprising a substrate; an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate; a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof; a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate of the second transistor; a storage capacitor connected to the current-source line and the gate of the first transistor, for storing a voltage signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and a third transistor that has a source and a drain connected to the electrode and a gate signal line for a display element other than said display element, and that has a gate

controlled such that current flowing from the first transistor to the electrode is led to the gate signal line for the other display element., the method comprising the steps of:

storing charge into the storage capacitor by controlling a gate voltage of the second transistor;

controlling the gate of the third transistor by changing a potential of a first line for a display element other than the display element to be inspected; and

measuring an amount of charge or current flowing from the electrode via the third transistor by using a measuring unit connected to the first current-source line for the display element to be inspected.

11. (ORIGINAL) A display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate of the second transistor;

a storage capacitor connected to the current-source line and the gate of the first transistor for storing a signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and

a diode connected to the electrode and to a gate signal line for a display element other than the display element.

12. (ORIGINAL) The display apparatus according to claim 11, wherein the display element is an organic EL element.

13. (ORIGINAL) A display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate the second transistor;

a storage capacitor connected to the current-source line and the gate of the first transistor for storing a signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and

a diode connected to the electrode and to an additionally-provided current releasing line.

14. (CURRENTLY AMENDED) A method for inspecting each pixel of ~~the active matrix display apparatus according to claim 11 or 13~~a display apparatus, comprising: a substrate; an electrode for provision of a display element included

in each of a plurality of pixels provided on the substrate; a first transistor that is connected to the electrode and a current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof; a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate of the second transistor; a storage capacitor connected to the current-source line and the gate of the first transistor for storing a signal supplied from the data-storing signal line via the second transistor, while the second transistor is in an on state; and a diode connected to the electrode and to a gate signal line for a display element other than the display element, the method comprising the steps of:

storing charge into the storage capacitor by controlling the gate of the second transistor; and

measuring an amount of charge or current flowing from the electrode via the diode, by changing a potential of a first line for a display element other than the display element to be inspected and using a measuring unit connected to a second line for the display element other than the display element to be inspected.

15. (ORIGINAL) An active-matrix display apparatus, each pixel included in the display apparatus comprising:

an electrode connected to a display element for the pixel;

a first transistor connected to the electrode and to a first line for the pixel;

a second transistor connected to a gate of the first transistor and to a data-storing signal line for supplying a voltage signal;

a storage capacitor connected to the gate of the first transistor and to a second line for the pixel, and

a load capacitor connected to the electrode and the gate of the first transistor such that charge is accumulated by current flowing from the first transistor to the electrode.

16. (ORIGINAL) The display apparatus according to claim 15, wherein the display element is an organic EL element.

17. (CURRENTLY AMENDED) ~~A method for inspecting each pixel of the active-matrix display apparatus according to claim 15~~an active-matrix display apparatus, each pixel included in the display apparatus comprising an electrode connected to a display element for the pixel; a first transistor connected to the electrode and to a first line for the pixel; a second transistor connected to a gate of the first transistor and to a data-storing signal line for supplying a voltage signal; a storage capacitor connected to the gate of the first transistor and to a second line for the pixel, and a load capacitor connected to the electrode and the gate of the first transistor such that charge is accumulated by current flowing from the first transistor to the electrode, the method comprising the steps of:

supplying a first voltage to the first transistor;

storing charge into the storage capacitor and the load capacitor by temporarily turning on and turning off the second transistor through control of the gate signal line connected to the gate of the second transistor to thereby apply a voltage of the data-storing signal line to the gate of the first transistor;

reducing the first voltage to a predetermined voltage; and



measuring an amount of charge stored in the storage capacitor by turning on the second transistor and using a charge measuring unit connected to the data-storing signal line.

18. (ORIGINAL) The method according to claim 17, wherein in the step of reducing the first voltage, the first voltage is reduced to a predetermined voltage that is lower than the voltage of the electrode in the step of storing the charge.

19. (CURRENTLY AMENDED) The method according to claim 17~~or 18~~, further comprising a step of pre-resetting the amount of charge stored in the storage capacitor, prior to the step of supplying the first voltage to the first transistor.

20. (ORIGINAL) The method according to claim 17, wherein in the step of reducing the first voltage, the first voltage is reduced until the first transistor is turned off by a threshold voltage of the first transistor.

21. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor connected to the electrode and to a current-source line;

a second transistor connected to a gate of the first transistor and to a data-storing signal line with a gate signal line being connected to a gate thereof;

a storage capacitor connected to the gate of the first transistor and to the current-source line; and

a load capacitor connected to the electrode and to the gate of the second transistor of another display element such that charge is accumulated by current flowing when the first transistor is turned on.

22. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor connected to the electrode and to a current-source line;

a second transistor connected to a gate of the first transistor and to a data-storing signal line with a gate signal line being connected to a gate thereof;

a storage capacitor connected to the gate of the first transistor and to the current-source line; and

a load capacitor connected to the electrode and to the gate of the second transistor of the same display element and connected to the gate signal line such that charge is accumulated by current flowing when the first transistor is on.

23. (ORIGINAL) The display apparatus according to claim 22, wherein the display element is an organic EL element.

24. (CURRENTLY AMENDED) A method for inspecting each display element of the active-matrix display apparatus according to claim 22 an active-matrix

display apparatus comprising a substrate; an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate; a first transistor connected to the electrode and to a current-source line; a second transistor connected to a gate of the first transistor and to a data-storing signal line with a gate signal line being connected to a gate thereof; a storage capacitor connected to the gate of the first transistor and to the current-source line; and a load capacitor connected to the electrode and to the gate of the second transistor of the same display element and connected to the gate signal line such that charge is accumulated by current flowing when the first transistor is on, the method comprising the steps of:

storing charge into the storage capacitor by controlling the gate of the second transistor; and

measuring an amount of charge or current flowing from the electrode by changing a potential of a gate signal line for a display element other than the display element to be inspected and using a measuring unit connected to the current-source line for the display element to be inspected.

25. (CURRENTLY AMENDED) The active-matrix display apparatus according to ~~one of claims 1 to 4, claim 7, claims 11, claim 13, claim 15, claims 21 and 22,~~ wherein the other display element is adjacent to the display element to be inspected.

26. (CANCELLED)

27. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate thereof; and

a third transistor that has a drain connected to the electrode and that has a source and a gate connected to the gate signal line for the display element, so that current flowing from the first transistor to the electrode is led to the gate signal line for the display element.

28. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate the second transistor; and

a diode connected to the electrode and to the gate signal line for the display element.

29. (CURRENTLY AMENDED) A method for inspecting each display element of the display apparatus according to claim 27 or 28 an active-matrix display apparatus comprising a substrate; an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate; a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof; a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate thereof; and a third transistor that has a drain connected to the electrode and that has a source and a gate connected to the gate signal line for the display element, so that current flowing from the first transistor to the electrode is led to the gate signal line for the display element, the method comprising the steps of:

controlling a gate voltage of the second transistor by changing a potential of the gate signal line for the display element to be inspected, supplying a voltage determined by the data-storing signal line to the gate of the first transistor, and controlling the gate of the third transistor or the diode; and

measuring an amount of charge or current flowing from the electrode via the third transistor or the diode, by using a measuring unit connected to the gate signal line or the first current-source line.

30. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate thereof;

a third transistor connected to the electrode that has a gate and a drain connected to a gate line for a display element other than said display element and that has a gate controlled such that current flowing from the first transistor to the electrode is led to a gate signal line for the other display element.

31. (ORIGINAL) An active-matrix display apparatus, comprising:

a substrate;

an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate;

a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof;

a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate the second transistor;

a third transistor connected to the electrode, which has a gate and a drain connected to a gate line for a display element other than said display element and to a gate line for the display element and which has a gate

controlled such that current flowing from the first transistor to the electrode is led to a gate signal line for the display element.

32. (CURRENTLY AMENDED) A method for inspecting each display element ~~of the display apparatus according to claim 30 or 31~~ an active-matrix display apparatus comprising a substrate; an electrode for provision of a display element included in each of a plurality of pixels provided on the substrate; a first transistor that is connected to the electrode and a first current-source line and that determines on or off state of the display element by using a voltage applied to a gate thereof; a second transistor that is connected to the gate of the first transistor and a data-storing signal line and that determines a gate voltage of the first transistor by using a voltage in a gate signal line connected to a gate thereof; a third transistor connected to the electrode that has a gate and a drain connected to a gate line for a display element other than said display element and that has a gate controlled such that current flowing from the first transistor to the electrode is led to a gate signal line for the other display element, the method comprising the steps of:

controlling a gate voltage of the second transistor by changing a potential of the gate signal line for the display element to be inspected, supplying a voltage determined by the data-storing signal line to the gate of the first transistor, and controlling the gate of the third transistor; and

measuring current flowing from the electrode via the third transistor by using a measuring unit connected to the first current-source line for the display element to be inspected or to the gate signal line for the display element other than the display element to be inspected.